

New techniques

Minimally invasive technique for repairing complete earlobe cleft

Técnica minimamente invasiva para correção de lóbulo de orelha totalmente fendido

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ABSTRACT

In an effort to avoid some common undesirable consequences of surgical techniques for repairing earlobe clefts, such as notch formation and cosmetic deformities, the authors describe a minimally invasive technique for repairing a complete earlobe cleft. A single simple suture was followed by 90% trichloroacetic acid applications to transform a complete earlobe cleft into an incomplete cleft. Due to its ease of execution, low cost and good functional results, this technique is a good option for repairing complete earlobe clefts.

Keywords: ear; ear deformities, acquired; cosmetic techniques.

RESUMO

Devido a algumas limitações nas técnicas cirúrgicas de correção de lóbulo de orelha fendido, como cicatrizes inestéticas e recidivas, os autores descrevem técnica corretiva minimamente invasiva com base em ponto único de sutura simples, seguido de aplicação de ácido tricloroacético a 90%. Devido à facilidade técnica do procedimento, baixo custo e ótimos resultados, a técnica descrita deve ser considerada opção terapêutica para a correção de lóbulos de orelha totalmente fendidos.

Palavras-chave: orelha; deformidades adquiridas da orelha; técnicas cosméticas.

INTRODUCTION

Due to the cultural habit of wearing earrings, the earlobe is very sensitive to ruptures. Earrings are often too heavy for such a delicate structure, which does not have the cartilaginous support that is present in other parts of the ear.

The repair of split earlobes is a frequent demand in the daily practice of dermatologists and plastic surgeons. The several surgical techniques described in the literature for repairing fully split earlobes have limitations, such as recurrences, the formation of unattractive scars, keloids and undesirable angulations in the earlobe's contour.¹⁻³

This case report describes a straightforward correction technique based on the application of 90% trichloroacetic acid in the cleft, followed by a single simple suture in the distal end. The advantages of this technique suggest it is a good option for repairing this type of clefts.

METHODS

A 49-year-old female patient (Patient A), Fitzpatrick phototype II (Figure 1) and a 33-year-old female patient (Patient B), Fitzpatrick phototype IV (Figure 2) presented complete clefts in the earlobe of their right ears. Neither had undergone any type of surgical treatment to repair the defect.

After local asepsis and anesthetic infiltration of the lobule with 2% lidocaine without epinephrine, 90% trichloroacetic acid was applied directly onto the two edges of the cleft with a wooden stick until the frosting effect was obtained; there was no need to neutralize the acid. The two edges of the cleft were then brought together with a single simple suture in the distal tip of the cleft with 5-0 non-absorbable monofilament suture. Finally, the cleft was closed with micropored tape, which was kept in place for 4 days.

The patients were instructed to return to the practice each week for six weeks for the application of 90% trichloroacetic acid with a wooden stick inside the cleft. The suture was removed only after the cleft was completely repaired. In both patients, the clefts' edges were completely closed after the fifth application. The sixth and final session of acid application prevented the edges from inverting and corrected the shape of the tip of the earlobe – which was observed after the fifth application (Figure 3).

The patients were followed up monthly for 10 months. Local transient erythema was observed in both cases. Keloids or

unattractive scars were not observed after the end of treatment. The patients were allowed to have the treated earlobes pierced again after the third month of follow-up; the new hole was made beside the scar (Figures 4 and 5).

DISCUSSION

Many of the surgical techniques described in the literature preserve the original hole, however this does not happen in the



Figure 3 - Patient A: Complete coaptation of the edges of the cleft after the fifth 90% trichloroacetic acid application. Local erythema and tendency of the edges to invert are observed



Figure 1 - Patient A: Pre-treatment appearance of split earlobe



Figure 4 - Patient A: Final appearance of the treated earlobe after the 10 month follow-up



Figure 2 - Patient B: Pre-treatment appearance of torn earlobe



Figure 5 - Patient B: Final appearance of the treated earlobe 3 months after the end of treatment

technique described in the present study, which lets the patient decide whether to repierce the earlobe.^{4,5}

De Mendonça et al. proposed a non-surgical technique for repairing incomplete earlobe clefts also using 90% trichloroacetic acid inside the cleft. The closure of the cleft is based on the cicatricial adhesion of the tissue caused by the acid's action.⁶

This study describes a technique that turns a fully split earlobe into an incomplete split earlobe through a single suture in the distal tip of the cleft, with serial applications of

trichloroacetic acid that follow the same cicatricial adhesion principle.

A tendency for the edges of the cleft to invert can be observed, yet this is easily corrected with a further application of acid in the site and the molding of the coapted cleft.

The authors consider this technique to be a good treatment option for earlobes' complete clefts since it is technically simple and cost effective, and yields good aesthetic and functional results. ●

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